

KENWOOD

ASB-966R

Service Bulletin

Amateur Radio Division

Subject: TM-231 Intermittent Memory Loss

Date: July 10, 1992

Background:

Some TM-231A owners have reported that the transceiver intermittently loses its memory channel information at power on. The following modification will absorb pulses on the CPU interrupt line (INT4) and reconfigure the backup switching circuit to avoid unintentional memory loss.

WARNING: This radio uses micro-sized surface mount components, and/or multi-layer circuit boards. *If you are not familiar with the techniques for service of this type of equipment do not attempt this modification yourself.* You will invalidate your warranty if you attempt to modify the equipment and damage the radio. If you are at all in doubt about your qualification to perform this modification you should seek qualified assistance.

Required Parts:

220uf, 6.3v Electrolytic Capacitor
.01uf Ceramic Capacitor
.022uF Ceramic Capacitor
2.2K ohm Chip Resistor
1K Ohm Carbon Resistor
2.0v Zener Diode

CE04NW0J221M
CK45B1H103K
C91-0457-05 (Revised)
RK73FB2A222J
RD14BB2C102J
MTZ3.0JB

Procedure:

1. Disconnect the power supply, antenna and microphone.
2. Remove the top and bottom covers (4 screws). You may want to disconnect the speaker and set it aside with the speaker mount.
3. Remove the knobs from the front panel.
4. Remove the nut from the microphone jack and the 11mm nut from the channel selector switch.
5. Remove the 4 screws that secure the front panel to the body of the transceiver.
6. Pull the front panel off the transceiver to expose the Control Board.
7. Remove the 3 screws from the Control Board. Gently pull the board off the transceiver.
8. Perform the changes shown in the accompanying diagram. C202 is on the component side of the Control Board. All other work will be done on the foil side of the board.

This modification may be covered under warranty. Time required for this modification is 1 hr or less.

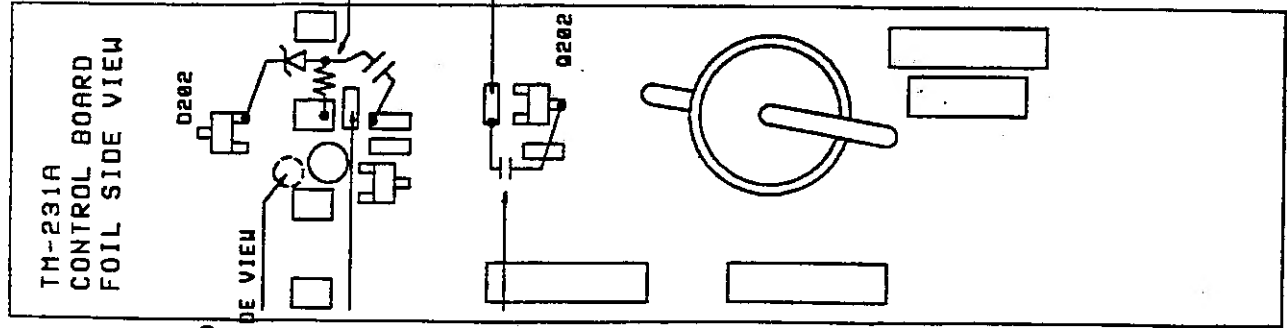
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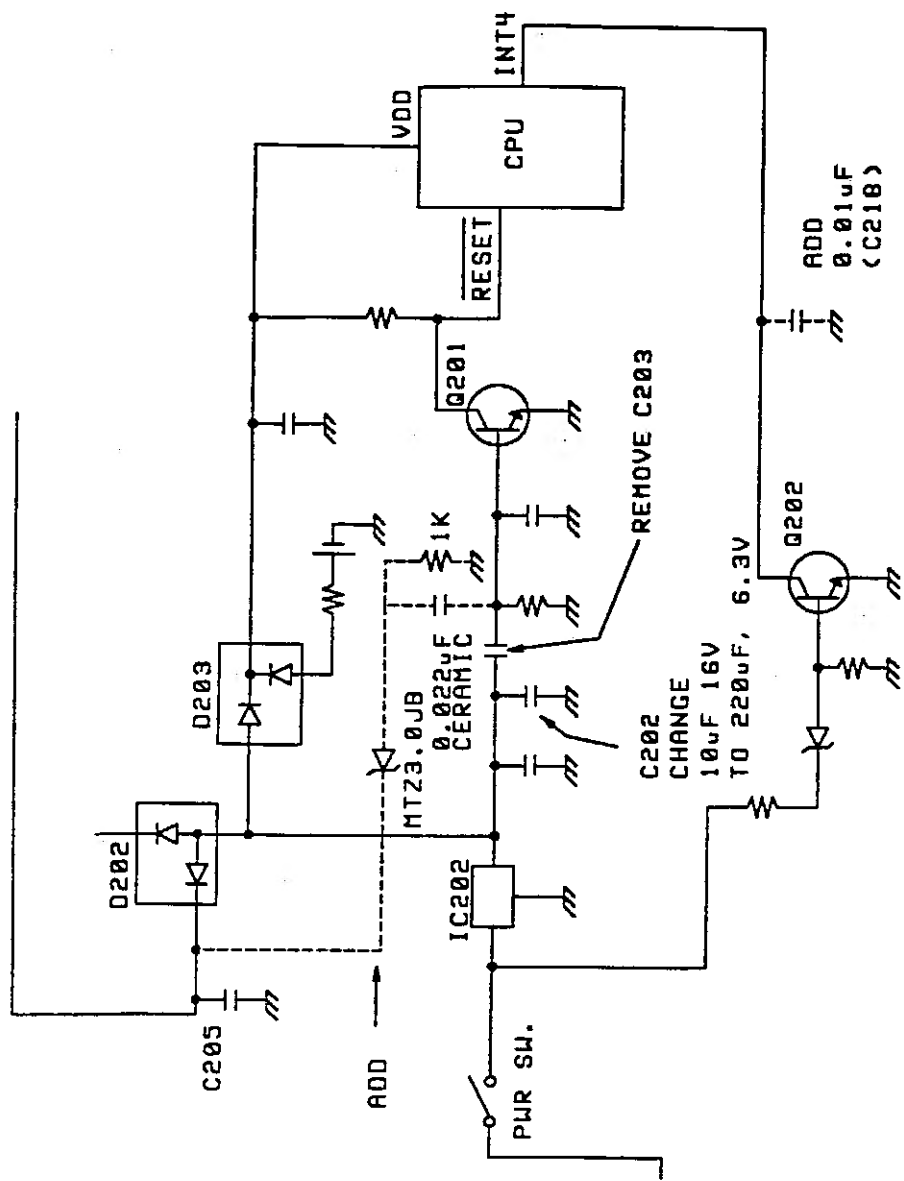
Kenwood U.S.A. Corporation

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C202
CHANGE
10μF, 16V TO
220μF, 6.3V

ADD
MT23.0JB ZENER
1K RESISTOR
0.022μF
CERAMIC CAP



R236
CHANGE
470K TO 2.2K

ADD
0.01μF
(C218)